



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/854,435	05/11/2001	Steven Y. Ng	10008-1191	7251
25213	7590	01/20/2004	EXAMINER	
HELLER EHRMAN WHITE & MCAULIFFE LLP 275 MIDDLEFIELD ROAD MENLO PARK, CA 94025-3506			ACQUAH, SAMUEL A	
			ART UNIT	PAPER NUMBER

1711

DATE MAILED: 01/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.



UNITED STATES PATENT AND TRADEMARK OFFICE

COMMISSIONER FOR PATENTS
UNITED STATES PATENT AND TRADEMARK OFFICE
P.O. Box 1450
ALEXANDRIA, VA 22313-1450
www.uspto.gov

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Paper No. 20040108

Application Number: 09/854,435
Filing Date: May 11, 2001
Appellant(s): NG ET AL.

DEREK P. FREYBERG
For Appellant

MAILED
JAN 20 2004
GROUP 1700

EXAMINER'S ANSWER

This is in response to the appeal brief filed 07/16/2003.

(1) Real Party in Interest

A statement identifying the real party in interest is contained in the brief.

(2) *Related Appeals and Interferences*

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) *Status of Claims*

The statement of the status of the claims contained in the brief is correct.

(4) *Status of Amendments After Final*

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) *Summary of Invention*

The summary of invention contained in the brief is correct.

(6) *Issues*

The appellant's statement of the issues in the brief is correct.

(7) *Grouping of Claims*

Appellant's brief includes a statement that claims 1-14 and 17-19 stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

(8) *Claims Appealed*

The copy of the appealed claims contained in the Appendix to the brief is correct.

(10) *Grounds of Rejection*

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-14 and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heller et al 5,968,543 combined with Sparer et al 4,549,010. This rejection is set forth in prior Office Action, Paper No. 10 dated 02/026/2003.

(11) Response to Argument

It is Appellants' position that the references cannot be combined as indicated because "the Examiner has failed to establish a *prima facie* case of obviousness".

It is the Examiner's position that Appellants' argument is not convincing for the following reasons:

The primary reference, commonly-owned by the Appellants herein, discloses polymers with controlled physical state and bioerodibility, comprising polyorthoesters having the formula (1), and being derived from a reaction between a diketene acetal, and mixture of diols, such that the polymer contains at least 0.1 mol % alpha-hydroxy acid (0.1 mol% of A in the formula 1 is R¹). There is no disclosure in this primary reference for the polymer to contain "at least 0.1 mol% of the A units are R^{4a}". ***In other words, there is no disclosure in this reference that the mixture of diols contain "a diol containing at least one functional group independently selected from the group consisting of amide, imide, urea, and urethane groups"*** as claimed. Thus, the one controlling issue is whether one of ordinary skill in the art would have been motivated to modify the primary reference to add a diol having functionalities as claimed based on the teachings of the secondary reference to Sparer et al? Appellants argue that Sparer does not disclose the inclusion of an alpha-hydroxy acid. However, it is the Examiner's position that said disclosure is not relevant to the issues because the

Art Unit: 1711

primary reference does disclose the inclusion of said acid in the polymer, but does not disclose the inclusion of a diol with functionalities as indicated above.

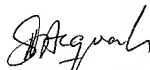
It is herein specifically pointed out, and as admitted by Appellants in the "Summary of the invention", the purpose of including a diol having functionalities selected from the group consisting of amide, imide, urea, and urethane, is to provide "**hydrogen bonding**" units in the polymer.

The secondary reference to Sparer also discloses a bioerodible polyorthoester which is obtained by the reaction of a diketene acetal and a mixture of diols. Patentees clearly teach in column 2, line 10 et seq., the inclusion of "**diols containing at least one functional group which produces hydrogen bonding or other association**" (emphasis added). Patentees further disclose in lines 61-63 that "**Examples of functional groups which will accomplish this include: amide, urethane, urea and imide**" (emphasis added). See also EXAMPLE 1 in column 5 wherein patentees disclose the use of such mixtures of diols. Thus, it is the Examiner's position that one of ordinary skill in the art desirous of preparing a bioerodible polyorthoester comprising structural units which provide "hydrogen bonding" as claimed would have been sufficiently motivated to include in the mixture of diols, a diol containing functional groups as taught by Sparer. In essence, it would have been *prima facie* obvious to modify the primary reference by including a diol having functionalities as claimed based on a combination of the disclosures of the prior arts as explained supra. Also, it is the Examiner's position that all the claims, including the dependent claims, have been obvious based on the explanations above.

Art Unit: 1711

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,



SAMUEL A. ACQUAH
PRIMARY EXAMINER

GROUP 220 / 700

S.A.A.

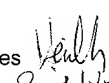
January 9, 2004

Conferees

Seidleck, James

Wu, David

Acquah, Sam



HELLER EHRMAN WHITE & MCAULIFFE LLP
275 MIDDLEFIELD ROAD
MENLO PARK, CA 94025-3506